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THE CURRENT SITUATION

AND

RECOMMENDED ACTIONS FOR MANAGEMENT

OF THE

GEORGETOWN LAKE BASIN

BY

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DECEMBER 1982

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ABSTRACT

The Georgetown Lake Basin is a popular and heavily used recreation complex located in West Central Montana within 100 miles of 200,000 state residents. This area is easily accessible yearlong via Interstate and Alternate 10-A, the Anaconda-Pintler Scenic Highway.

The Georgetown Lake Area was settled in 1862 in response to the discovery and mining of gold and silver. The mineral based economy slowly gave way to limited agriculture and recreation following construction and later enlargement of the Flint Creek Dam which flooded most of the valley.

This high mountain Basin offers numerous opportunities for quality yearlong recreation and a unique mix of attractions that meet many of the needs for people seeking relief from their work day routines.

Current Basin development is extensive with area attractions and land availability as factors which will result in rapid growth in response to improved economic conditions.

The quantity and quality of fishing in Georgetown Lake has always been the major attraction that entices people into the area. Although trout size is now smaller, the introduction of fresh water Salmon provides a large catchable fish population and high fishermen success.

Considerable volumes of timber was harvested during the late 1800's and early 1900's and transported to local mines for fuel and timbers. The Basin still produces modest quantities of sawtimber, posts, and poles, for manufacture by local mills.

This paper discusses the current situation, problems that exist, opportunities, and develops recommended actions that will improve management of National Forest lands. These guides and standards should influence private landowners to plan and develop their lands in a manner that will maintain a quality life style for Basin residents and satisfy recreation oriented publics using both developed facilities and dispersed recreation opportunities.

INTRODUCTION

The objective of this report is to summarize the current situation and to develop recommendations for management of the Georgetown Lake Basin.

The Georgetown Lake Basin is regionally important as it provides easily accessible, high quality, and numerous recreation opportunities. These opportunities include excellent fishing, diverse water oriented activities, hunting, hiking, and consistently good conditions for alpine and cross country skiing and snowmobiling.

Water from Georgetown Lake is used extensively for industrial, agricultural, recreational, and power generation purposes. This reservoir is not only the dominate influence within the Basin but secondary benefits extend both fifty miles north to irrigate portions of the Clark Rork Valley and fifty miles southward into Butte where large quantities of the lake water is used to process copper ore.

This report includes 32,864 acres of public and private land which drain into Georgetown Lake. This hydrographic unit extends from Georgetown Lake 8 miles northward to an elevation of 8773 feet in the Flint Creek Mountain Range and 9 miles southward to 9848 feet at the Continental Divide within the Anaconda-Pintler Wilderness.

The main Basin attraction is Georgetown Lake. In 1885 a low earthen dam was constructed across Flint Creek to produce power for mining companies at Philipsburg and Granite. In 1919 the present concrete core earthen dam was constructed impounding additional water and increasing the surface area to its present 2818 acres and raising the effective level to 6424 feet above sea level.

The Anaconda-Pintler Wilderness Area with its sweeping timbered foothills and sharp Continental Divide peaks provides an impressive southern backdrop to the lake basin.

Georgetown Lake with its undulating shoreline, low ridges and gentle slopes provides unsurpassed views enjoyed by thousands of summer home owners and non-resident recreationists.

The gentle westerly winds and high elevation temperatures provide welcome relief from valley heat.

Fishing is the most popular yearlong activity as the lake is closed to angling for only two and one half months each year. Fishermen and campers visit the Basin by mid-May to catch the unwary trout but most recreationists arrive with the more favorable weather in mid-June and many return to lower elevations by the end of September.

Winters are moderate with usually heavy snow accumulations by Christmas. Alpine and cross country skiers as well as snowmobile enthusiasts take full advantage of these excellent snow conditions.

Some home owners live in the Basin yearlong while the vast majority of owners use their cabins during the summer season with only intermittent visits during the winter months.

PURPOSE

The objective of this project is to:

1. Identify the background and historical development within the Basin.

2. [illegible]

3. [illegible]

DEMAND

Detailed analysis of demand has not been scheduled within the scope of this study. However, 1974 studies by Lutey and Grotbo indicates use within the Basin would continue and expand at a significantly rapid rate. The 1980 Census Report for Montana substantiates these predictions by identifying continued population growth.

Earlier area studies were unable to predict the current escalation in fuel price and no one was able to visualize public response to high fuel costs. With the Georgetown Lake recreation opportunities located close to significant population centers, the fuel crunch resulted in few lasting effects. Fewer non-resident persons visited the area but use shifted to more local residents that came less frequent but stayed for significantly longer times.

CURRENT SITUATION: Appendix A and B For Vicinity and Study Area Map

The 32,864 acre Georgetown Lake Basin is located in West Central Montana within the counties of Granite and Deer Lodge. Excellent yearlong access is provided via Interstate 94 and U.S. 10-A, the only designated scenic highway in the State of Montana.

Mining was the early activity that encouraged development of the Georgetown Basin. The local mines produced an estimated 11.5 million dollars worth of ore prior to 1920 and only limited values since. The Cable, Gold Coin, and Southern Cross are mines prominent in the early history of the area.

Lands that are no inundated by Georgetown Lake were used as early as 1872 as summer pasture for cattle.

In 1885 the first small earthen dam was built across Flint Creek by the Montana Water and Electric Power Company to produce electricity for use by the Bi-Metallic Mining Company operations at Philipsburg and Granite. The reservoir came within the jurisdiction of the Federal Power Commission in the early 1900's and the dam was reconstructed as an earth fill, concrete core structure that increased Georgetown Lake to its present 2818 acres and a full pool level of 6424 feet above sea level.

In 1905 the Butte-Anaconda and Pacific Railroad was extended west from Anaconda to serve the town of Georgetown. This railroad greatly improved access into the Basin. The addition of special weekend trains hauled many fishermen and greatly expanded recreation use of the Basin.

Many of the recreation residences located on private as well as the National Forest lands were constructed during the 1920's and early 1930's with only limited building continuing into the 1950's. Since that time nearly all recreation residences have been constructed within subdivisions or on private tracts.

RECREATION: Appendix C-1

By the early 1960's heavy recreation use had developed throughout the Basin but most of it was of a dispersed nature with camping, fishing, and other recreation activities mostly reflecting individual preferences for favorite shoreline locations.

Following completion of the National Forest Outdoor Recreation Resource Review in the mid-1960's the Deerlodge Forest placed high priority upon upgrading and replacement of recreation facilities at Georgetown Lake.

Fortunately the nearby Anaconda Job Corps was able to schedule much of their work needed to improve campground, boating, and picnic facilities to their present excellent standards.

The Basin received heavy use on a yearlong basis because of its many attractions, easy access, and a location which is within 2 hours driving time for 200,000 Montana residents.

Although numerous alternative recreation opportunities exist throughout Western Montana, few areas can match the mix of recreation, fishing, and winter sports opportunities available at Georgetown Lake.

Developed facilities within the Basin are numerous, diverse, and widespread.

Data summarized in Appendix C-2b indicate wide variation within user groups such as size of traveling parties, age, and origin of users. Circle graphs on page 6 graphically displays the major user groups while the circle graph on page 7 indicate a high degree of user non-compliance with the fee system. The graph on the bottom of this page shows that 32 percent of campground use is by persons 62 years and older using the Golden Eagle Passports.

This data is startling and certainly calls for modification of our fee collection system and also that developed facilities must be improved to accommodate older persons with limited mobility.

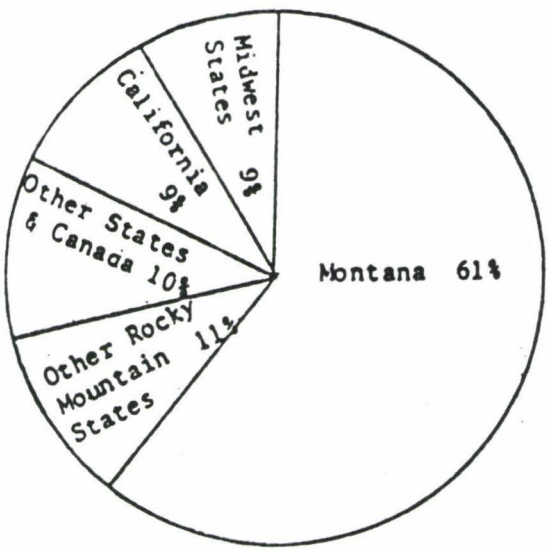
Changes which this data identifies includes better signing to notify the traveling public where developed facilities are located and higher standard interior trails to access tables, water, and handicap toilets. Development of a short, high standard, nature trail could expect heavy use by older campers. Fish cleaning at lakeside campgrounds can quickly develop into an odorus problem especially since seagulls are not present to clean up behind successful fishermen.

Developed and dispersed sites are handling use at weekday levels but peak weekends and holidays exceed all possible capacity of the Basin.

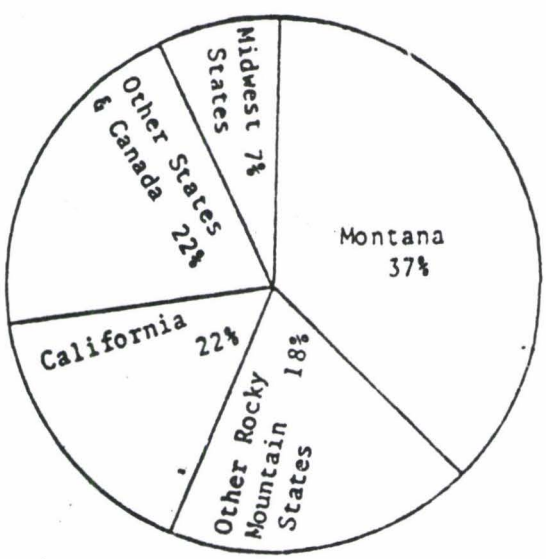
One of the greatest needs commonly identified is the total lack of facilities to accommodate group picnic and camping needs, i.e., family reunions, church groups and special gatherings.

With development of the Discovery Basin Ski Area in the early 1970's, winter use has greatly expanded from ice fishing and snowmobiling to include downhill and cross-country skiing and snow plan.

CAMPGROUND USERS BY GEOGRAPHICAL ORIGIN 1981

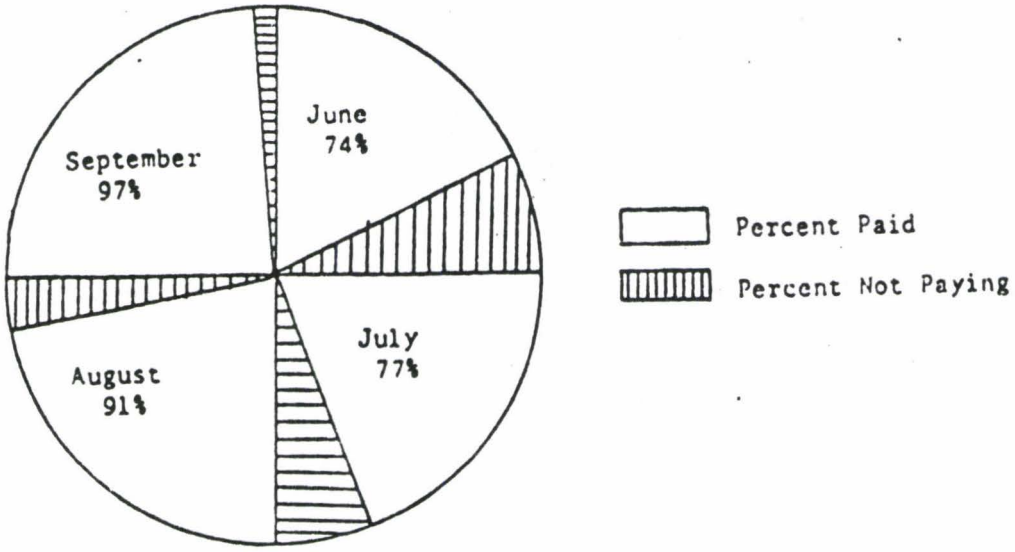


Destination oriented charge campgrounds. Average number of persons per vehicle = 3.25



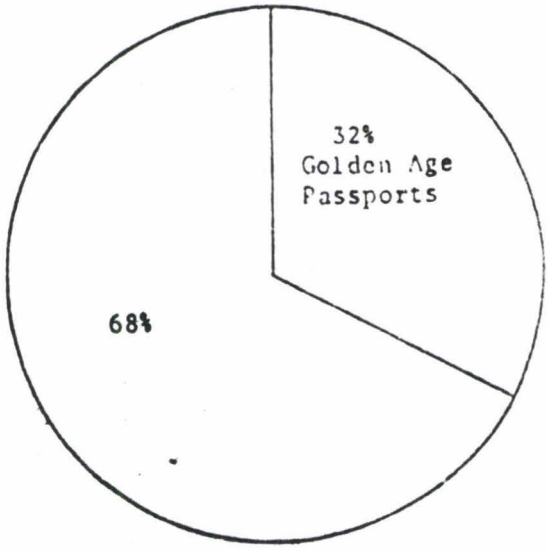
Highway oriented charge campgrounds. Average number of persons per vehicle = 2.75

CAMPGROUND FEE SYSTEM COMPLIANCE SCHEDULED SEASON OF USE



GOLDEN AGE PASSPORTS AS A PERCENT OF TOTAL PAID CAMPGROUND USERS

All Charge Campgrounds
All Origins



MINERALS: Appendix D

As identified earlier the discovery of valuable minerals first attracted settlers to the Basin. Mining from 1862 through 1920 produced significant quantities of gold and silver. Some limited mining continued until the mines were closed during World War II. Following the 1940's shutdown only small scale mining has taken place, mostly in the form of ventures and promotional schemes, none of which appear to be very successful.

There are most likely valuable mineral deposits located along the North Fork of Flint Creek and also south of Georgetown Lake in the Dry Creek Drainage. Hard rock mining in Dry Creek presents limited problems as runoff is mostly underground, is a considerable distance from Georgetown Lake, and well screened from the recreation public. Mineral development along Flint Creek and Cable Mountain presents a more complex situation as the valley bottom is narrow with very steep side slopes.

Current oil and gas leasing activity within the overthrust belt has resulted in extensive activity in the Georgetown Lake Basin. Most private lands are currently under lease while approximately three-fourths of the National Forest land is either leased or under lease application. It is expected that all available public lands will be leased within one year.

Seismic activities and possible followup drilling will result in significant impacts from access roads and drill sites. Normal lease stipulations will provide most needed protection but careful review and monitoring of individual projects will be required to protect water and aesthetic values.

LIVESTOCK GRAZING: Appendix E

Basin grazing started in 1872 as miners and settlers moved into the area. This activity was rather short-lived as construction of the original Flint Creek Dam in 1885 flooded much of the available pasture land. Small numbers of cattle continued grazing both private and National Forest land until 1970 when cattle were fenced from grazing to the lakeshore. Some cattle continued to graze closed areas each year as fences were poor and gates frequently left open.

Boundaries as shown on the Appendix Map define lands that are currently included within grazing allotments. These pastures support cattle for approximately three months and provide 1451 animal months of grazing.

With recognized high recreation values it is recommended that current grazing continue while expansion into other areas of the Basin should be carefully reviewed and permitted only if conflicts with other uses are minimal or can be readily mitigated.

TIMBER MANAGEMENT: Appendix F

The Georgetown Lake Basin has produced timber for more than 100 years. First for fuel, buildings, and mine timbers, and now for boards, poles, and posts. Much of the timber that can be seen from the lake is second growth lodgepole pine.

Since the early 1960's timber has been cut from 1308 acres of National Forest and 127 acres of private land. Other areas have been selectively cut for posts, poles, and clearing for ski runs, lifts, and home construction. In addition to lands that have been cutover there are two additional sales prepared and under contract or soon to be advertised. These sales will remove timber from an additional 352 acres.

Expansion of the Discovery Basin Ski Area can be expected to remove trees from another 200 acres, as lifts and runs are cleared. There is no evidence that timber harvest has adversely affected water quality on Georgetown Lake but careful review of future sales and their effects on the Basin should be a standard requirement.

The Mountain Pine Bettle can be expected to infest trees in the Basin within the next few years. Should this occur the impact on aesthetics will be severe as will be the subsequent potential for wildfire.

TRANSPORTATION SYSTEM:

Access into the Basin started with wagon roads around 1862 and was later improved with extension of the B.A. & P. Railroad. Construction of the current paved highway system followed much later. Roads throughout the Basin were mainly developed as needed to access mines and aid timber harvest. This system gradually evolved through use and improvement into the current extensive system of paved, graveled, and dirt roads described in Appendix G.

For the most part access is good although several segments of high use roads collect water, develop deep mud holes, cause muddy water to enter creeks and Georgetown Lake and produce large quantities of dust during dry summer months. Other low standard roads, or jeep trails, access the lake along steep ridges and cause serious rutting and washing of silty loam soils into the water.

Some roads constructed to access timber are closed and revegetated while others are improved and retained as part of the expanding Forest transportation system. Few timber roads have resulted in off-site impacts to water quality and area aesthetics.

The trail system is nearly nonexistent as roads access most desirable segments of the Basin. One trail does partially access eastern portions of the Anaconda-Pintler Wilderness but it was never completed to connect with the Continental Divide National Recreation Trail.

Completion of this short trail segment should make this little used part of the wilderness more attractive to hikers.

Other short trails are needed but they have been described elsewhere as they more closely meet developed recreation needs.

WILDLIFE:

Big game animals and birds normally found within a high mountain forest setting frequent the Basin. Numbers are not significant but elk, deer, moose, and mountain goats are hunted throughout the area. The most frequented habitat is some distance from the lake mostly as a result of people and home construction. Game animals, other than moose and mountain goat, leave the Basin by early December and don't return until April.

Hunting and recreation developments may be on a collision course in parts of the Basin as many homes are constructed in timbered areas frequented by deer. The discharge of guns in this setting is resulting in concerns by and possible injury to residents.

Waterfowl do frequent Georgetown and Echo Lakes but numbers are modest and most stay only a short time as their food supply is limited.

Georgetown Lake is shallow, has moderately warm water, and is a highly productive fishery. Almost since the original dam was constructed in 1885 the lake has been known widely as a producer of many and large fish. Fish size has been gradually reduced by heavy fishing but numbers of catchable trout remains high. Introduction of fresh water salmon has added greatly to fish numbers and to the enjoyment of fishermen who can catch as many as 200-300 Salmon in one short day of fishing.

LAND USES:

Land ownership patterns within the Basin developed early and became very complex as the result of patented mining claims, railroad grant lands, and deeded homesteads.

Construction of the Flint Creek Dam and Georgetown Lake made the local situation even more comple as it created an area especially attractive to fishermen and the recreating public.

Appendix II-4 provides a detailed summary of lake shore ownership and uses broken down by categories. The 1125 user and individual land ownerships within the Basin identifies the existing heavy use and provides indications that potential for construction of additional recreation residences is very large.

With the complex land ownership pattern the opportunity for land disputes is frequent.

Several cases of unauthorized use of National Forest are known and concerted efforts are progressing toward resolving the disputed areas and occupancies. Although much has been done a great deal of work with local landowners will be required to gain cooperation towards resolution of title disputes throughout the Basin.

Sixty-four percent of the Georgetown Lake shore is privately owned with nearly ninety-two percent of this owned by the Anaconda Copper Company. With the shutdown of the Anaconda Smelter and rapidly changing corporate policy towards this area there is a real potential that much of the lake shore could be sold into other private ownership. The Anaconda Company has been a good responsive landowner around the lake but changing economic conditions can make rapid changes. Much of the Anaconda property is well suited for development via resorts, private residences, etc., thus potentially excluding public use from most of the lake shore.

In light of these conditions the Forest Service should evaluate future management direction within the Basin and seriously consider acquisition of several strategic tracts of land as described in Appendix H-3.

Acquisition of these lands would consolidate ownerships, assure future public access, protect fish spawning, and improtant waterfowl areas.

Appendix H-2 identifies several National Forest tracts which are isolated, or for other reasons are not manageable for public purposes. It is suspected that some lands may contain improvements which are encroachments from adjacent private lands.

The Forest Service should evaluate these tracts for possible disposal through exchange or sale if enabling legislation is approved.

Private interests have expressed the following concern which will continue as problems until a concerted effort is implemented for their resolution.

1. Overnite accommodations within the Basin are limited and not adequate to meet project demands.

2. Facilities to handle sewage from self-contained trailer is inadequate resulting in some dumping along area roads.

3. Studies have been made and county wide plans drawn to implement a large container system for garbage disposal. To date, a public garbage disposal program is non-existent.

4. There is a rapidly growing need to set aside an area for disposal of wood debris, i.e., stumps, limbs, old buildings, etc. Summer long individual burning will quickly effect Basin air quality.

GEORGETOWN LAKE - CLEAN LAKES PROJECT: Appendix I

This Federally funded project has completed many of the scheduled studies that monitor and evaluate impacts to Georgetown Lake. Unpublished findings to date include the following interesting data:

1. Water quality has improved from what it was ten years ago.

2. Sewage seeping into the lake from private homes is not as significant as anticipated.

3. Pond weed areas have increased by nearly 100% over the past ten years.

4. Proliferation of pond weed is consuming much of the nutrients available within the lake. Resulting vegetative growth makes for difficult fishing and boating during parts of each year.

Preliminary findings appear to identify problems and outline opportunities for management which should be incorporated into future Lake Basin Management.

IMPLICATIONS OF THE CURRENT SITUATION

1. Corrective actions are needed to improve and protect public health and safety.

2. Numerous high use areas within the Basin are receiving unacceptable impacts to soils, vegetation, and water.

3. There is a demonstrated need for some types of additional development such as group picnic areas and public boat access to Echo Lake.

4. Concentrations of people is resulting in undesirable social activities and behavior.

5. Rapidly increasing winter recreational use must be recognized and schedules prepared to reflect increased management.

RECREATION OPPORTUNITY SPECTRUM

The following summaries describe Georgetown Lake Basin characteristics within a framework that forms the basic concepts of R.O.S. (Physical, Managerial, and Social Settings.) Combinations of activities, settings, and experience opportunities are described as experience levels ranging from Primitive, Semi-Primitive Motorized and Non-Motorized, Roaded Natural and Rural, to a full urban setting. As one can readily visualize, this continuum ranges from a high degree of solitude on one end to a highly social experience on the other.

Although this concept may contain numerous inconsistencies within these settings when applied to a given area, it is not apparent in the Basin as heavy recreation activities are certainly concentrated within a rural setting.

As dispersed recreation increases it is quite possible that some areas presently classified as Roaded Natural Appearing or Semi-Primitive Motorized may develope rural characteristics during periods of concentrated use, and with time, may assume these characteristics on a permanent basis.

The following descriptions summarize current situations within the Basin.

Physical Setting

The history of development and physical characteristics are summarized in more detail within the situation description starting on page 4. The 2818 acre reservoir with the diverse recreation opportunities it provides is accepted as the principle area attraction. The dramatic mix of high mountains and forested hills interspersed with grassy meadows provides an excellent backdrop for the lake.

It is only a short drive from the lake to superb vistas overlooking adjacent valleys and the foothills which sweep upward into the high Continental Divide and the Anaconda-Pintler Wilderness.

Those recreationists looking for historical evidence can easily visit remains of 100 year old mines and tumbled down mills.

Detractors from this setting are nearby extra large timber harvest areas, rutting, and soil erosion resulting from vehicles driving along roads, and overused "camper villages" at several locations in close proximity to the lake.

The Lake Basin environment provides many examples of its forgiving nature as abandoned farmsteads, mines, and old roads, rapidly return to growing grass and young trees.

Managerial Setting

As discussed earlier the Georgetown Lake Basin enjoys a unique setting in Western Montana because of its Central location and yearlong accessibility from several population centers over well maintained highways. The lake provides excellent yearlong fishing while adjacent lands include numerous hiking and hunting opportunities.

The intermingled public and private land ownership has resulted in extensive development with adjacent public lands available to accommodate a broad spectrum of recreation activities ranging from a water oriented urban setting to the nearby Anaconda-Pintler Wilderness.

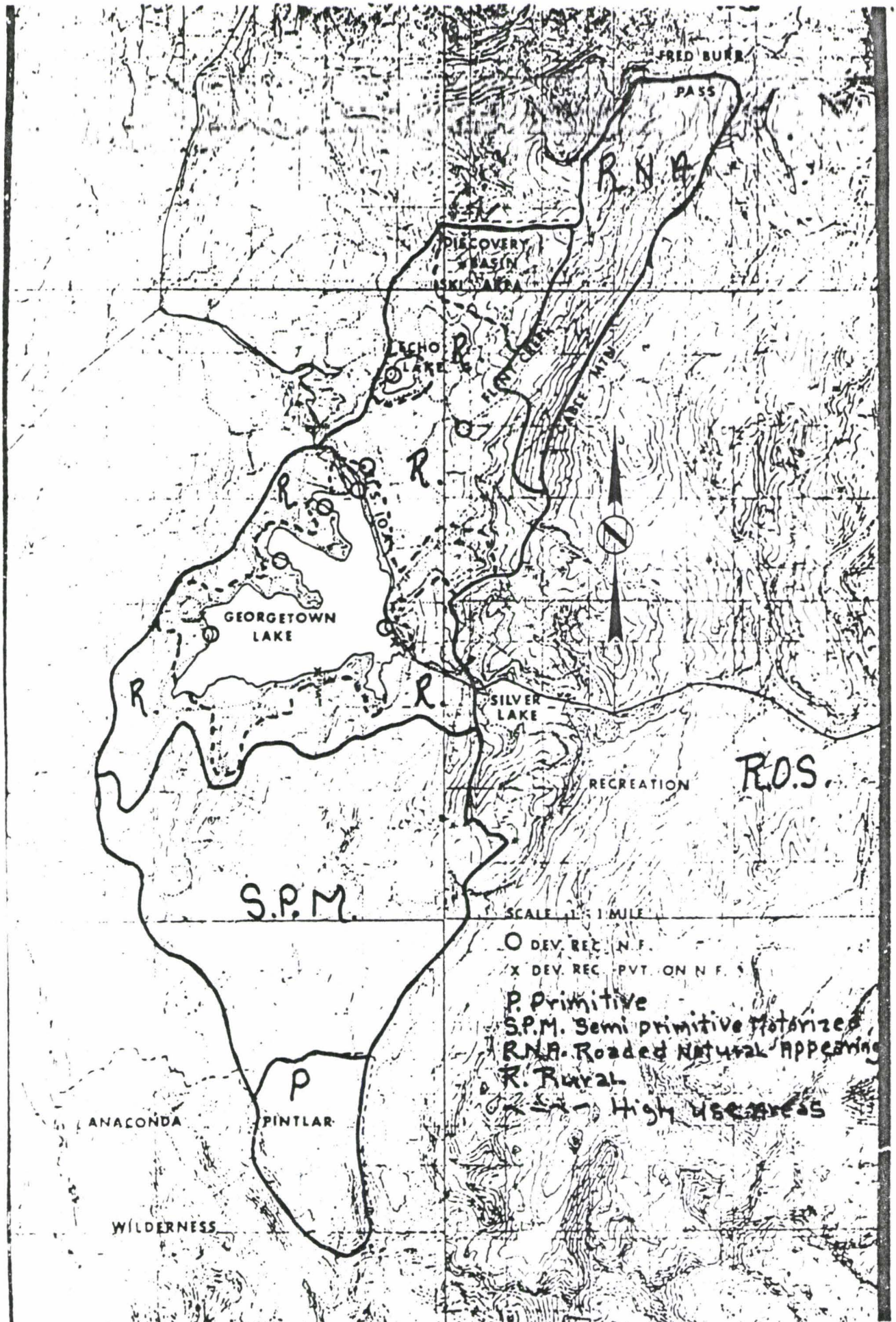
Summers are cool while the winter season is assured of a good snow pack, minimum temperature extremes, and few windy days that are so common to high mountain basins.

Social Setting

As outlined on the map on page 15 facilities and concentrated recreational activities are closely associated with Georgetown and Echo Lakes.

Recreation residences have long been a major part of area development and the focal point of Basin use. Campgrounds, picnic grounds, and boating facilities developed and expanded in response primarily to public use.

With development of dependable over-snow vehicles in the late 1960's and a ski area in the early 1970's, winter use has greatly expanded and diversified beyond the traditional ice fishing. Other rapidly developing activities include cross-country skiing, snow play, and dog sled racing.


FRED BURR
PASS
R.N.A.
DISCOVERY
BASIN
SKI AREA
ECHO
LAKE
R.
FLINT CREEK
ABSEE MTN.
R.
R.
ORE. 10A
GEORGETOWN
LAKE
R.
R.
SILVER
LAKE
RECREATION
R.O.S.
S.P.M.
SCALE 1" = 1 MILE
O DEV. REC. N.F.
X DEV. REC. PVT. ON N.F.
P. Primitive
S.P.M. Semi primitive Motorized
R.N.A. Roaded Natural Appearing
R. Rural
High Usage
P
ANACONDA
PINTLAR
WILDERNESS

MANAGEMENT OBJECTIVES

The preceding information can be readily summarized into the following statements which outline management direction for the Georgetown Lake Basin.

1. Carefully determine recreation facility voids and schedule development to meet real public needs.

2. Correct existing sanitation problems and work towards effective resolution for disposal of refuse, debris, and effleunt.

3. Provide public safety for vehicle travel, boating, camping, and dispersed winter activities.

4. Encourage lake and lake shore management which will protect and enhance water quality and esthetics.

5. Restore and rehabilitate road and camp areas which exhibit seriously damaged soils and vegetation.

6. Schedule development of facilities which are responsive to handicap and persons with limited mobility.

7. Design structures and facilities to minimize site impacts and future maintenance costs.

8. Prepare and implement a comprehensive transportation plan which identifies access needs and protects resources.

9. Construction and management activities will be scheduled to protect esthetics and maintain visual compatibilities.

10. Developed and dispersed winter recreation opportunities should be identified and scheduled for increased managerial support.

11. The Lake Basin currently identified within a rural setting should be managed to retain or enhance these characteristics.

12. Recreation opportunities within the Basin should be identified and disseminated to the public through improved signing and an information document.

13. More remote segments of the Basin identified as R.N.A. (Roaded Natural Appearing) and S.P.M. (Semi-Primitive Motorized) should be managed to provide wide ranging opportunities while maintaining these basic characteristics.

MANAGEMENT ASSUMPTIONS AND RECOMMENDATIONS

It appears from the previous documentation that considerable development throughout the Basin has precluded many management options. Recognizing this current situation there are still numerous nitches to fill which will greatly enhance public use and numerous opportunities to implement the following actions to meet Basin Management Objectives.

I. Recreation

A. Assumptions

1. Recreation pursuits will continue to increase at a 1-2% rate per year.

2. Recreation use by older or retired persons can be expected to increase from the present 32% to near 40% within 10 years.

3. Winter recreation can be expected to increase by 25% within 10 years.

4. Garbage, refuse, and sewage disposal problems will accelerate to an intolerable level without agressive solutions.

B. Management Recommendations

1. Construct handicap toilets at developed recreation sites. Appendix 2.

2. Design and construct one group picn area near the lake to accommodate 200 persons.

3. Upgrade recreation facilities to accommodate handicap or persons with limited mobility.

4. Install signing to improve safety and direct the public to low use facilities and away from congested or sensitive areas.

5. Design facilities and management activities to reduce costs, improve sanitation, and assure public safety.

6. Cooperate with private interests to meet public needs. Encourage the private sector to satisfy public needs for accommodations, sanitation, and support facilities.

7. Implement plans to encourage dispersion of both summer and winter recreation.

8. Redesign the Recreation Fee System Compliance Schedule to achieve a minimum of 90% compliance. Appendix C-2a.

II. MINERALS

A. Assumptions

1. Private capital will continue to locate and develop valuable mineral deposits.

2. Leasing and possibly exploration will continue until oil and gas reserves are known.

B. Management Recommendations

1. Mineral operating plans should identify specific standards that prevent sedimentation or other undesirable pollutants from entering Basin, streams, and lakes.

2. Locatable and leasable mineral development will be designed to protect esthetic values.

III. GRAZING

A. Assumptions

1. Livestock grazing will continue along the fringes of the Basin.

2. There will be periodic requests for permits to graze open grassland areas.

B. Management Recommendations

1. Grazing management should be permitted within native grassland and suitable timber harvest areas.

2. Livestock should not graze to the shores of Georgetown or Echo Lakes.

IV. TIMBER MANAGEMENT

A. Assumptions

1. A moderate demand for sawlogs and convertible wood products will continue.

2. Conflicts between timber harvest, recreation activities, esthetics, and development of private lands will continue as a sensitive issue.

3. The Mountain Pine Bettle can be expected to attack Lodgepole Pine trees in the Basin within the next three to five years.

B. Management Recommendations

1. Continue timber harvest at a rate that will protect or enhance recreation, esthetics, water quality, and private land values.

2. Anticipate the effects of a serious Mountain Pine Beetle attack and implement management to reduce tree susceptability near developed recreation sites and residential areas.

V. TRANSPORTATION SYSTEM

A. Assumptions

1. Driving on poorly located roads will increase resulting in an acceleration of soil movement and dust.

2. Highway 10-A will be improved, new roads, power and telephone lines will be constructed.

B. Management Recommendations

1. Make every effort to correct existing facilities which are visually incompatible or present hazardous situations or contribute towards degradation of air and water quality.

2. Develop a Basin Transportation Plan which identifies needed roads and trails while scheduling closure and rehabilitation of unneeded facilities.

VI. WILDLIFE MANAGEMENT

A. Assumptions

1. Wild animals and birds indigenous to high mountain habitats will continue to live within the Basin.

2. Georgetown Lake will continue as a high producer of trout and salmon.

3. Development will continue on private lands within the Basin to the detriment of big game population.

4. Heavy fishing pressure is expected to continue as the major factor limiting production of larger trout.

B. Management Recommendations

1. Special hunting restrictions may be necessary to protect local residents.

2. Work cooperatively with the Montana Department of Fish, Wildlife, and Parks to enhance the Georgetown and Echo Lake Fisheries.

VII. LAND MANAGEMENT

A. Assumptions

1. Conflicts will continue between all land ownerships.

2. National Forest Administration will continue to improve public land ownership patterns.

B. Management Recommendations

1. Identify land boundary marking needs and work cooperatively with private owners to locate and mark common corners and land lines.

2. Develop an accurate land adjustment plan which identifies lands desirable for National Forest Administration and those National Forest lands most suitable for private ownership. Appendix H-2 and H-3.

VIII. WATER QUALITY

A. Assumptions

1. Basin development will have great potential to adversely affect the streams and lakes.

2. Refuse and garbage accumulations will increase proportionate to Basin development.

B. Management Recommendations

1. Plans should be developed in cooperation with Basin residents which will incorporate and implement findings from the Georgetown Lake Clean Lakes Project. Appendix 1.

2. Water quality instrumentation of streams feeding Georgetown and Echo Lakes should be scheduled at an early date.

3. Work cooperatively with local counties to develop effective methods for disposal of locally generated garbage and refuse.

IX. PRIVATE DEVELOPMENT ON PUBLIC LANDS

A. Assumptions

Strategically located National Forest land will continue to be used by private enterprise, and other public agencies, to meet public needs.

B. Management Recommendations

1. All permitted and new facilities must be safe, sanitary, esthetically compatible to surroundings, and provide a significant and needed public service.

SUMMARY

The demand for outdoor recreation within the Georgetown Lake Basin is currently high with great potential for increases as a result of access, geographical location, area appeal, and private land availability.

Livestock have grazed within the Basin since 1872 but construction of Georgetown Lake in 1919 flooded lands most suitable for pasture. Since this time cattle numbers have been slowly reduced in response to second home construction, campground development and in 1970, exclusion from grazing to the lake shore.

Timber harvest will continue in the Basin with an emphasis shift towards combating the effects of the Mountain Pine Bettle attack expected within the near future.

Hunting has never been a big part of Basin activities but hunters will continue to use the area and some big game animals will be harvested. Fishing is expected to continue to be the most attractive activity within the Basin. The heavy fishing pressure is expected to result in smaller trout but the prolific Salmon will produce fish for all.

As in many areas throughout the west, local road systems developed in response to local needs, Georgetown Lake Basin was no exception. Many wagon and buggy roads that originally provided access to mines and haul routes for timber harvest are still used today; some are much better and others are not much more than the original poorly located tracks.

Many of the problems in the Basin are either associated with or a result of poor road location and conditions. Mud, silt, and dust are a seasonal occurrence with undesirable effects upon esthetics, water and air quality.

Land ownership within the Basin is very complex as a result of patented mining claims, homesteads, and railroad grant land intermingled with the National Forest.

Few boundaries have been located and marked so disagreements are common and resolution costly for the 1125 landowners and recreation residences located on leases within the Basin.

Development of existing vacant tracts will result in a large rural population with only rudimentary support facilities and a great potential for adverse impacts to Georgetown and Echo Lakes.

Oil and gas exploration and hard rock mining have a recognized potential for disruption of area attractions and to adversely affect water, air, and visual qualities of the entire Georgetown Lake Basin.

It is expected that warm season recreation use will remain relatively constant at current levels while winter activities are expected to expand by several times about current use.

Expansion of downhill and base facilities at the Discovery Basin Ski Area is expected to be a driving force that will act as a catalyst and encourage development of the Basin into a significant and attractive winter play area.

Localized site deterioration can be expected to continue and increase unless recognized problems are corrected and future Basin development is designed to meet standards that will enhance water, air, and esthetic quality.

The assumptions and management recommendations summarized in this report appear consistent with findings from several previous studies of activities within the Georgetown Lake Basin. One can only hope that currently recommended actions attain a high level of compatibility with the Forest Plan in progress.

Should a high degree of acceptance evolve the Forest Plan will provide the driving force which will make acceptance and scheduling of these recommendations a reality.

REFERENCES

Ingman, Gary L. and Bahls, Loren L.; 1979. An Assessment of Mining Impacts on Quality of Surface Waters in the Flint Creek Range of Montana.

Garrett, Paul; 1982. Annual Report, Georgetown Lake Clean Lakes Project, Deer Lodge and Granite County, Montana.

Lutey, Sylvan L. and Grotbo, Hoken P.; 1974. Granite County Comprehensive Plan. Urban Planning Grant No. C.P.A. MT 08-00-0062. 702-C

Lutey, Sylvan L. and Grotbo, Hoken P.; 1974. Georgetown Lake Drainage Land Use Inventory, Deer Lodge and Granite County, Montana. Urban Planning Grant No. C.P.A. MT 08-00-0062.

Nielsen, Boje; 1981. Pintler Scenic Route Signing.

Peccia, Robert and Associates; 1980. Comprehensive Solid Waste Management Plan Tri-County Solid Waste Planning Area.

Walker, Richard I.; 1977. A Management Plan Anaconda-Pintler Wilderness, Beaverhead, Bitterroot and Deerlodge National Forests.

Deerlodge National Forest, Philipsburg Ranger District; 1979. Interim Management Plan for Georgetown Lake.

Deerlodge National Forest; 1976, 1978. Interim Wildlife and Fisheries Management Plan.

Deerlodge National Forest, Philipsburg Ranger District; 1978. Upper Rock Creek Plan.

APPENDIX

A. Vicinity Map

B. Planning Area Map

C. Recreation Activities:

1. Map - Developed Sites on National Forest Lands.

2. Recreation Use

a. Statistical Summary of Charge Campgrounds - 1981.

b. Origin of Recreationists - Charge Campgrounds.

c. Fee System Compliance and Golden Age Passports.

D. Mineral Activity Zones.

E. Grazing Allotments.

F. Timber Harvest - Existing and Proposed.

G. Transportation System - Major Road Summary.

H. Land Uses - Plan Unit

1. Land Ownership - Federal VS. Private by County.

2. National Forest Lands Possibly Suitable for Disposal.

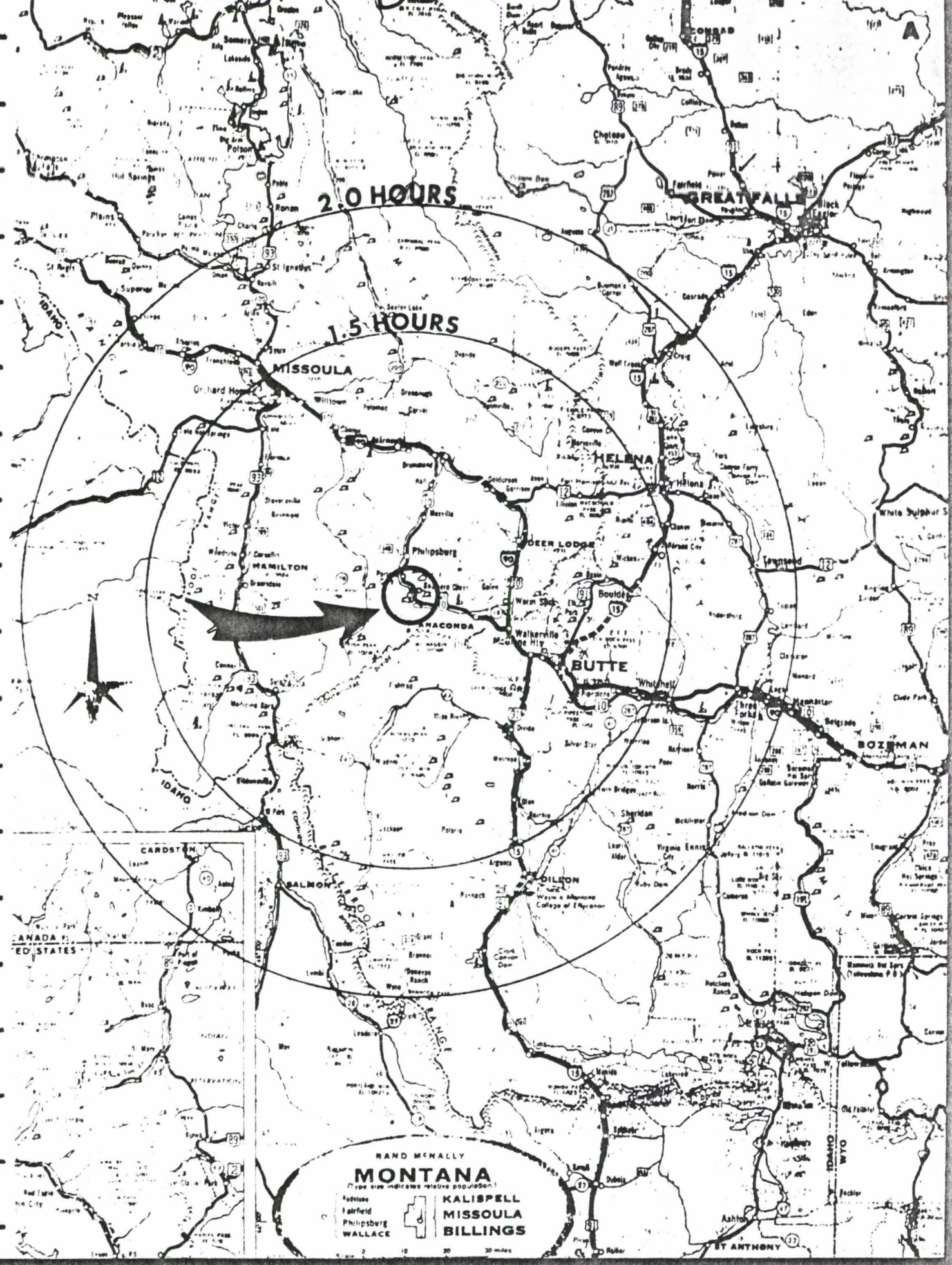
a. Map

3. Private Lands Desirable for National Forest Status.

a. Map

4. Georgetown Lake Basin Land Use Summary all Ownerships.

I. Georgetown Lake - Clean Lakes Project.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ANACONDA
DEER LODGE
Philipsburg
Kalispell
Fairfield
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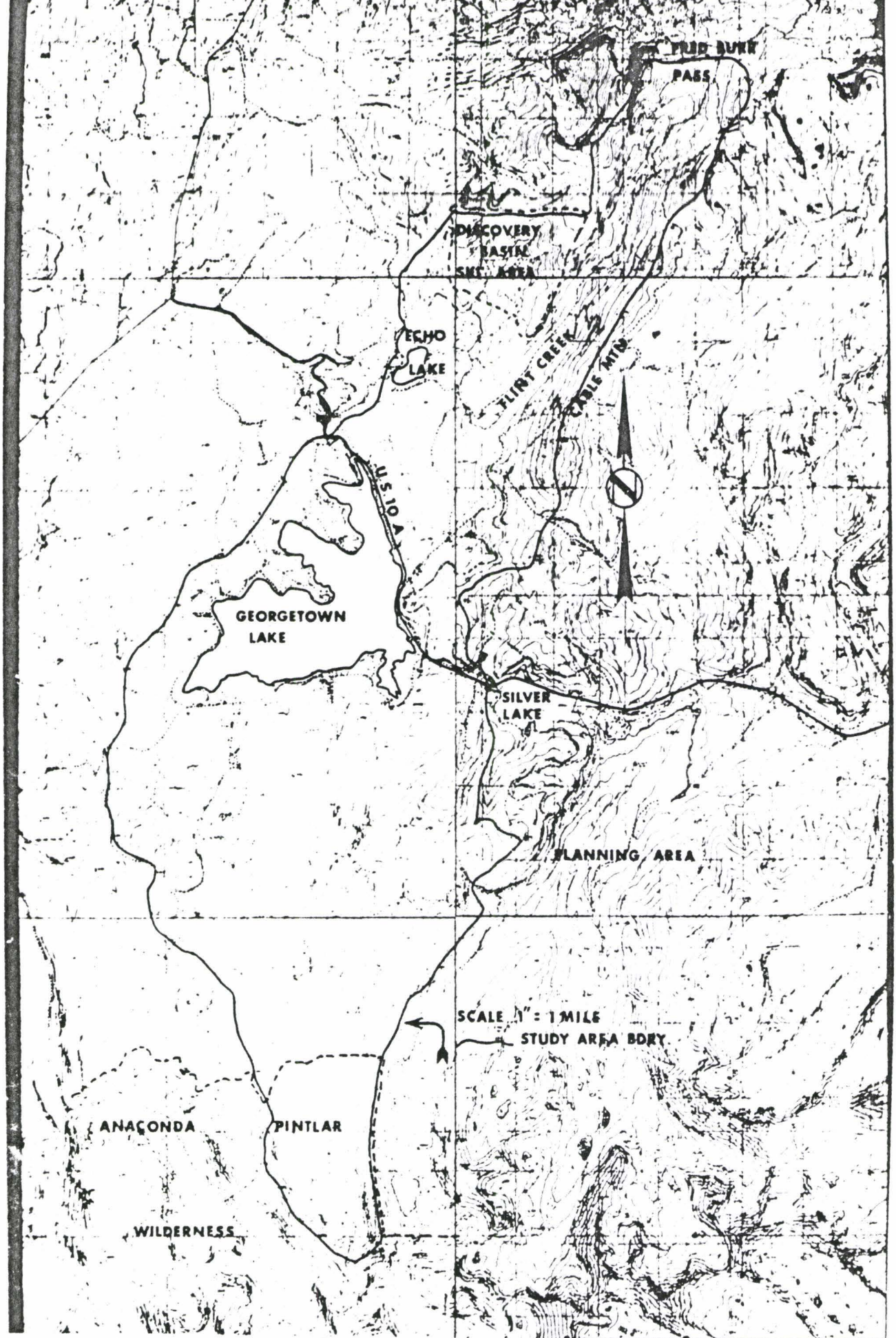
WALLACE
KALISPELL
MISSOULA
BILLINGS
RAND McNALLY
MONTANA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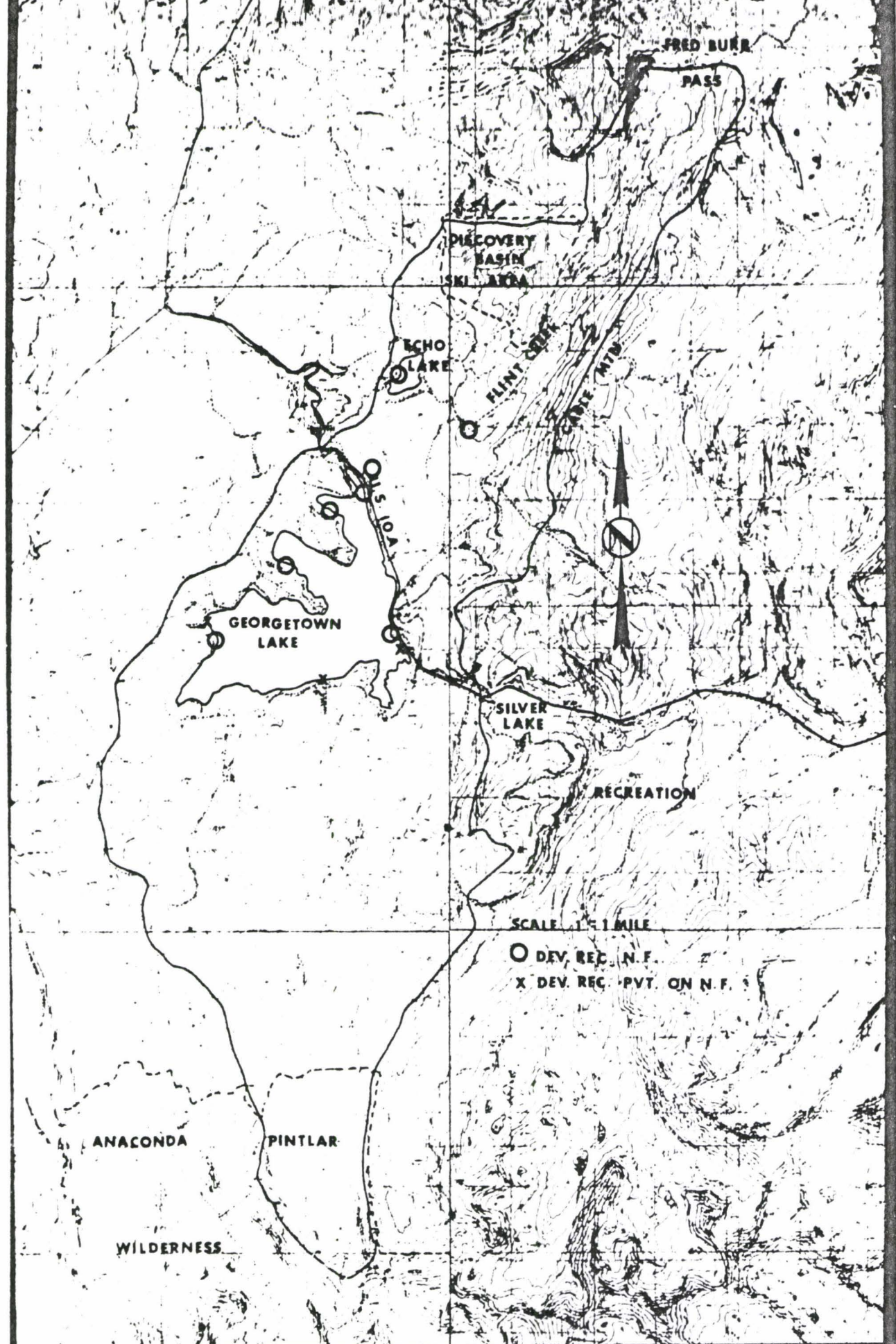
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PINTLAR
WILDERNESS

STATISTICAL SUMMARY
CHARGE CAMPGROUNDS
PHILIPSBURG RANGER DISTRICT
1981

Highway Oriented Camping (Lodgepole Campground)

Number of Units = 31

Season of Use = 6/15 through 9/30 = 107 days

Theoretical Capacity = 31 Units x 5 persons = 155 P.A.O.T.

Theoretical Season Capacity = 155 x 107 = 16,585

Actual Capacity - adjusted to reflect smaller traveling groups of 2.75 persons

31 x 2.75 = 85 P.A.O.T.

Actual Seasonal Capacity = 85 x 107 = 9095

Actual Use 1981 Season

Average number of persons occupying each site = 2.75

1131 campsites used during season x 2.75 = 3108

Use as a percent of actual capacity = 34%

Use by persons with Golden Age Passports = 31%

Use by Geographical Origin - Montana 37%
California 16%
Other Rocky Mountain States 18%
Midwestern States 7%
Other States & Canada 22%

Destination Camping (Piney Campground)

Number of Units = 36

Season of Use - 6/15 through 9/30 = 107 days

Theoretical Capacity = 36 Units x 5 persons = 180 P.A.O.T.

Theoretical Season Capacity = 180 x 107 = 19,260

Actual Capacity - adjusted to reflect smaller traveling groups of 3.25 persons

36 x 3.25 = 117 P.A.O.T.

Actual Seasonal Capacity = 117 x 107 = 12,519

Actual Use 1981 Season

Average number of persons occupying each site = 3.25

1955 campsites used during season x 3.25 = 6,354

Use as a percent of Actual Capacity = 51%

Use by persons with Golden Age Passports = 30%

Use by Geographical Origin -

Montana	58%
California	9%
Other Rocky Mountain States	6%
Midwestern States	13%
Other States & Canada	14%

Destination Camping (Philipsburg Bay)

Number of Units = 69

Season of Use - 6/15 through 9/30 = 107 days

Theoretical Capacity = 69 units x 5 persons = 345 P.A.O.T.

Theoretical Season Capacity = 345 x 107 = 36,915

Actual Capacity - adjusted to reflect smaller traveling groups of 3.25 persons

69 x 3.25 = 224 P.A.O.T.

Actual Seasonal Capacity = 224 x 107 = 23,968

Actual Use 1981 Season

Average number of persons occupying each site = 3.25

2049 Campsites used during season x 3.25 = 6659

Use as a percent of actual capacity = 28%

Use by persons with Golden Age Passports = 34%

Use by Geographic Origin -

Montana	64%
California	9%
Other Rocky Mountain States	17%
Midwestern States	5%
Other States & Canada	6%

ANALYSIS OF CAMPGROUND USE & COMPLIANCE WITH THE FEE SYSTEM

-1981-

Analysis of data gathered during the 1981 Recreation Season of June 15th through September 30th at 3 charge campgrounds within the Georgetown Lake Study Area revealed the following information.

Data was collected during daily compliance checks and verified through an analysis of data recorded on campground fee envelopes.

Recreation use of public facilities within the Georgetown Lake Basin can be summarized in the following manner.

1. Groups using the destination campgrounds average 3.25 persons.

2. Groups using the highway oriented campgrounds are smaller with an average of 2.75 persons.

3. Persons with Golden Age Passports average 30-34% of all use at all campgrounds.

4. Montanan's average 38-64% of all use with the lower figure represented as users of highway oriented facilities.

5. California is well represented with 9-16% of total use. The higher percentage is reflected at the highway campground.

6. Other Rocky Mountain States are represented by 6-18% of the use.

7. Midwestern states make up 5-13% of total use.

8. Other States and Canada are represented as 6-22% of the recreationists. The higher figure occurs at the highway oriented facilities.

9. Non-compliance with the campground fee system is much higher than expected ranging from an average of 3% in September, 9% in August to 23 and 26% respectively in July and June.

10. Recognizing that average traveling groups are smaller than the 5 used to compute theoretical campground capacity, actual group size adjustments result in the following use percentages at the 3 charge campgrounds.

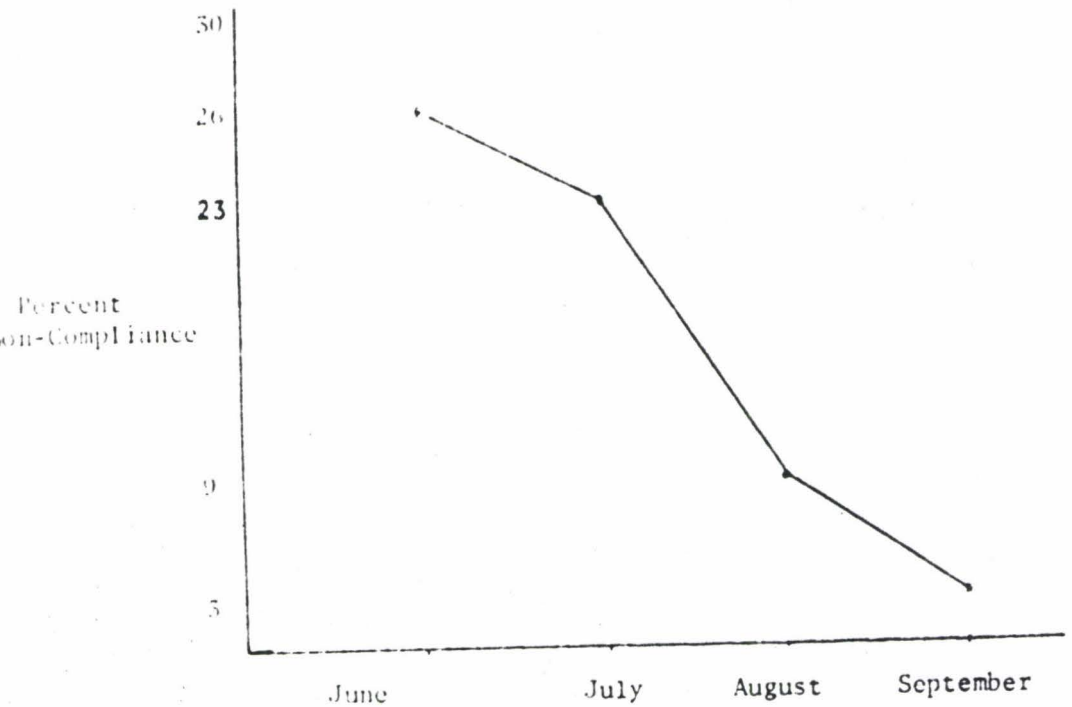
a.	Philipsburg Bay	28%
b.	Piney	51%
c.	Lodgepole	34%

11. It is apparent that we currently have unused campground capacity except during high use periods on weekends and holidays.

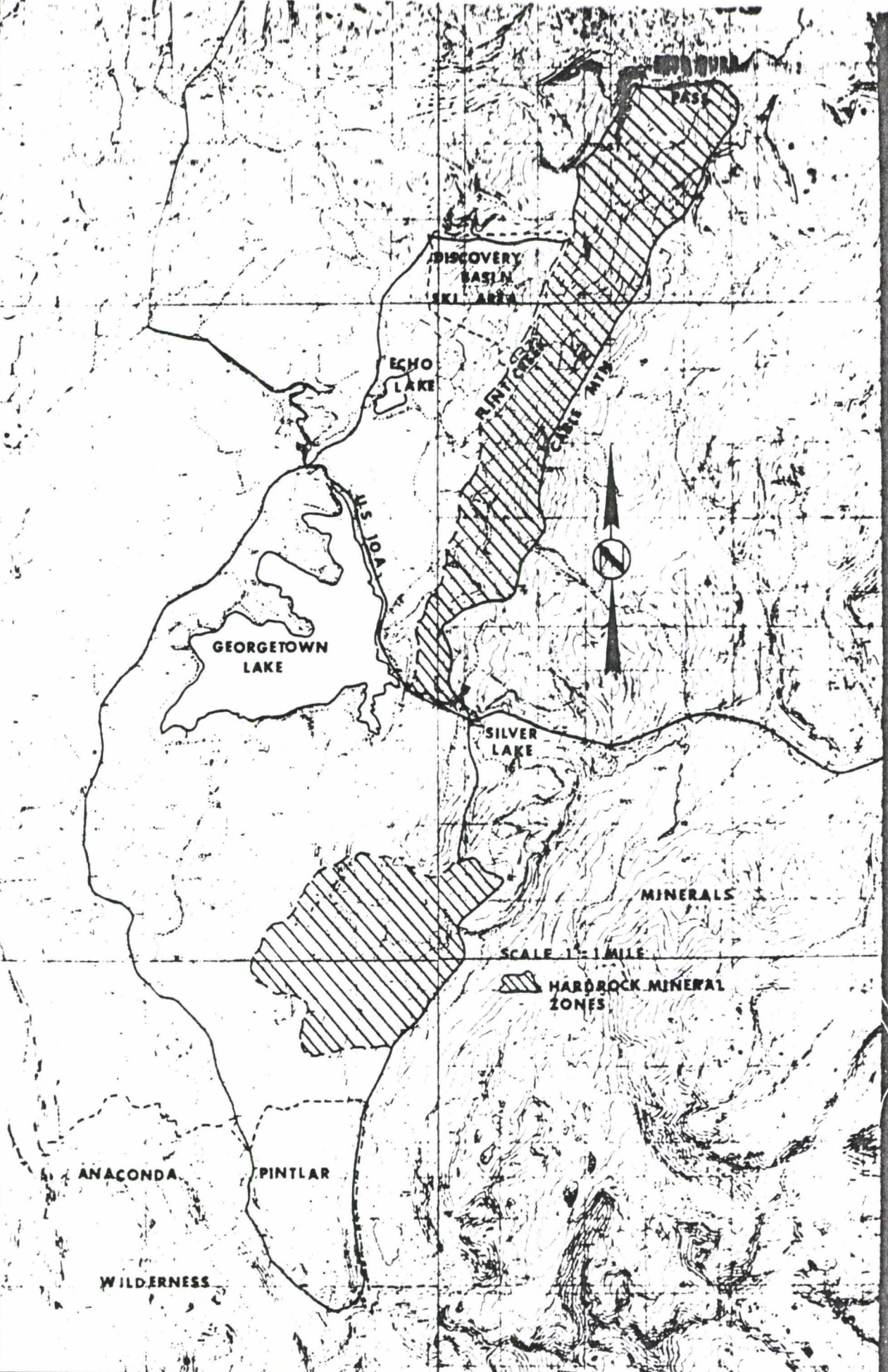
12. The high percentage of use by older persons would indicate an existing need for facilities that can accommodate handicap or persons with impaired mobility.

13. Use statistics would indicate a need for more effective signing that will lead people into the Philipsburg Bay Campground. Use at 28% leaves considerable unused capacity.

14. Modification of the District Fee Collection System must be implemented as non-compliance as shown on the following charts is excessive and unacceptable. Non-compliance with the Campground Fee System averages approximately 15% season long. Non-compliance during the early season of June and July is high with an average of 24.5%. August and September non-compliance averages 6%.



Use Season - Charge Campgrounds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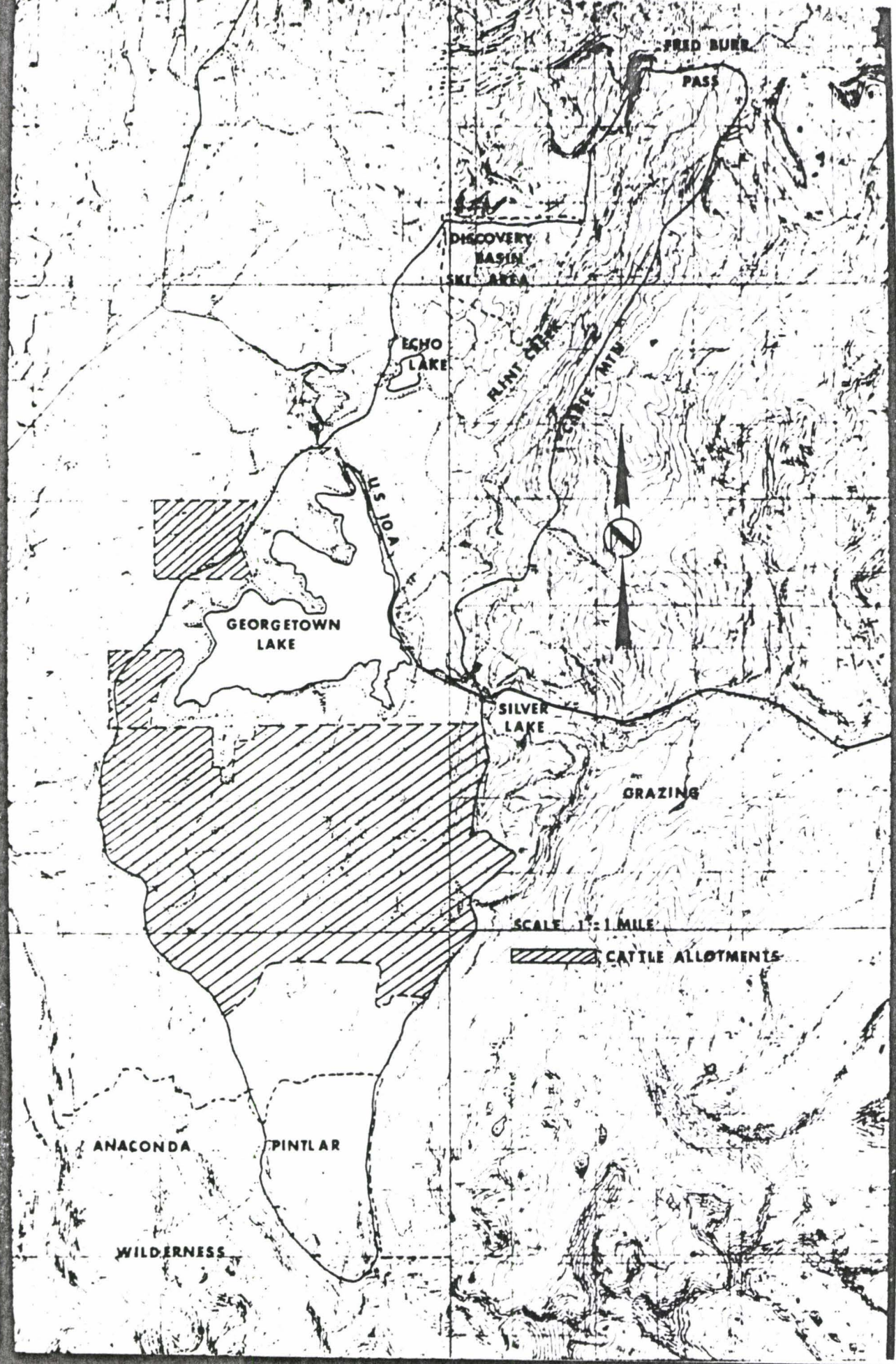
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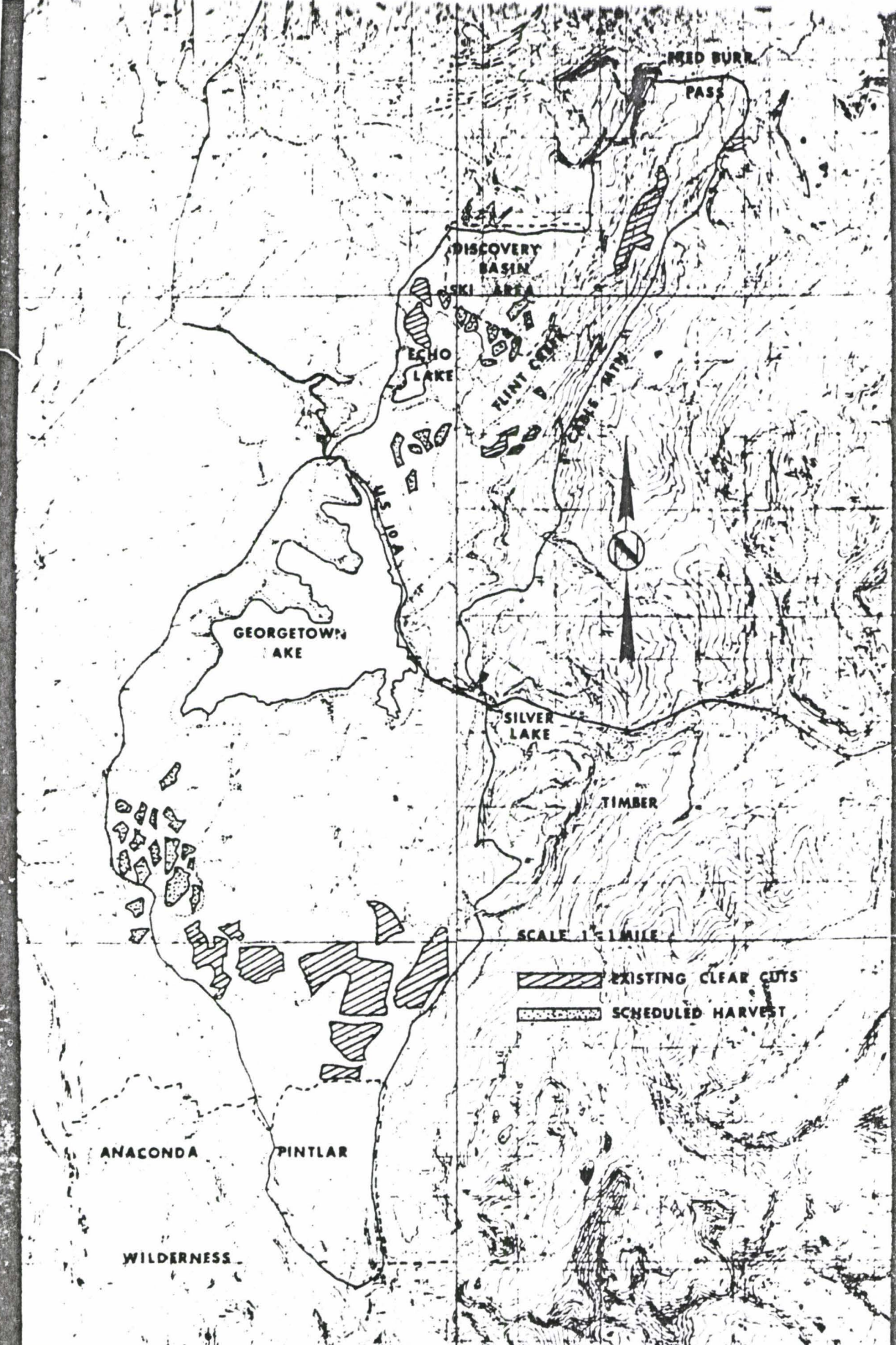
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TRANSPORTATION SYSTEM ROADS

I. PAVED & DRAINED

	Miles
A. U.S. 10-A	4.36
B. Other Local Access	16.85

II. GRAVEL & DIRT - GRADED & DRAINED

	Miles
A. All Local Access	27.60

III. LOW STANDARD ROADS DIRT SURFACE

Miles Unknown
(In excess of 75 miles)

A. Jeep Trails
B. Lake Access
C. Subdivision Access
D. Mining Access
E. Timber Access

SUMMARY
LAND OWNERSHIP
FEDERAL VS. PRIVATE BY COUNTY

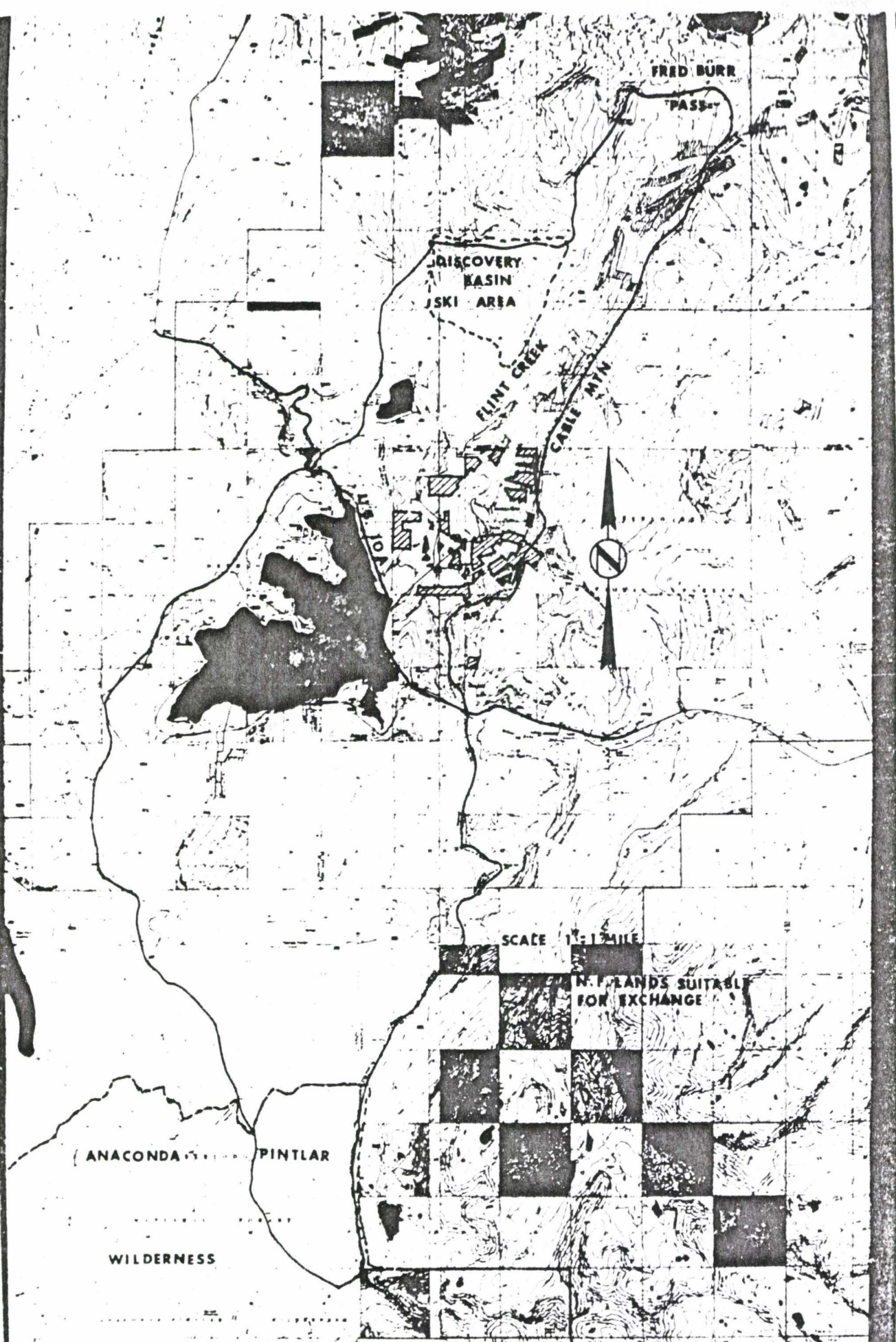
Township - Range	National Forest	Private	Total Acres	Special Areas - Acres Included		
				Echo Lake	Georgetown Lake	Anaconda-Pintler Wilderness
* 4N 13W	1,190	395	1,585	--	---	26
4N 14W	6,516	---	6,516	--	---	2,175
* 5N 13W	4,480	4,452	8,932	--	1,204	----
5N 14W	5,112	3,213	8,325	--	1,614	----
6N 13W	6,406	1,100	7,506	125	---	----
Totals	23,704	9,160	32,864	125	2,818	2,201

-OWNERSHIPS BY COUNTY-

*Deer Lodge	5,670	4,847	10,517		1,204	26
Granite	18,034	4,313	22,347	125	1,614	2,175

NATIONAL FOREST LANDS SUITABLE FOR EXCHANGE

Township	Range	Location	Description	Size
6N	13W	E½NW¼, S-32	Echo Lake	7 ac. ±
5N	13W	E½, NW¼, S-4	7 Scattered Tracts	105 ac. ±
		S½S½, S-5	3 Scattered Tracts	111 ac. ±
		S-8	9 Scattered Tracts	133 ac. ±
		S-9 & 10	7 Scattered Tracts	151 ac. ±
			(Deerlodge District)	43 ac. ±
		W½, S-16	7 Scattered Tracts	7 ac. ±
			(Deerlodge District)	22 ac. ±
			34 Tracts Total	579 ac. ±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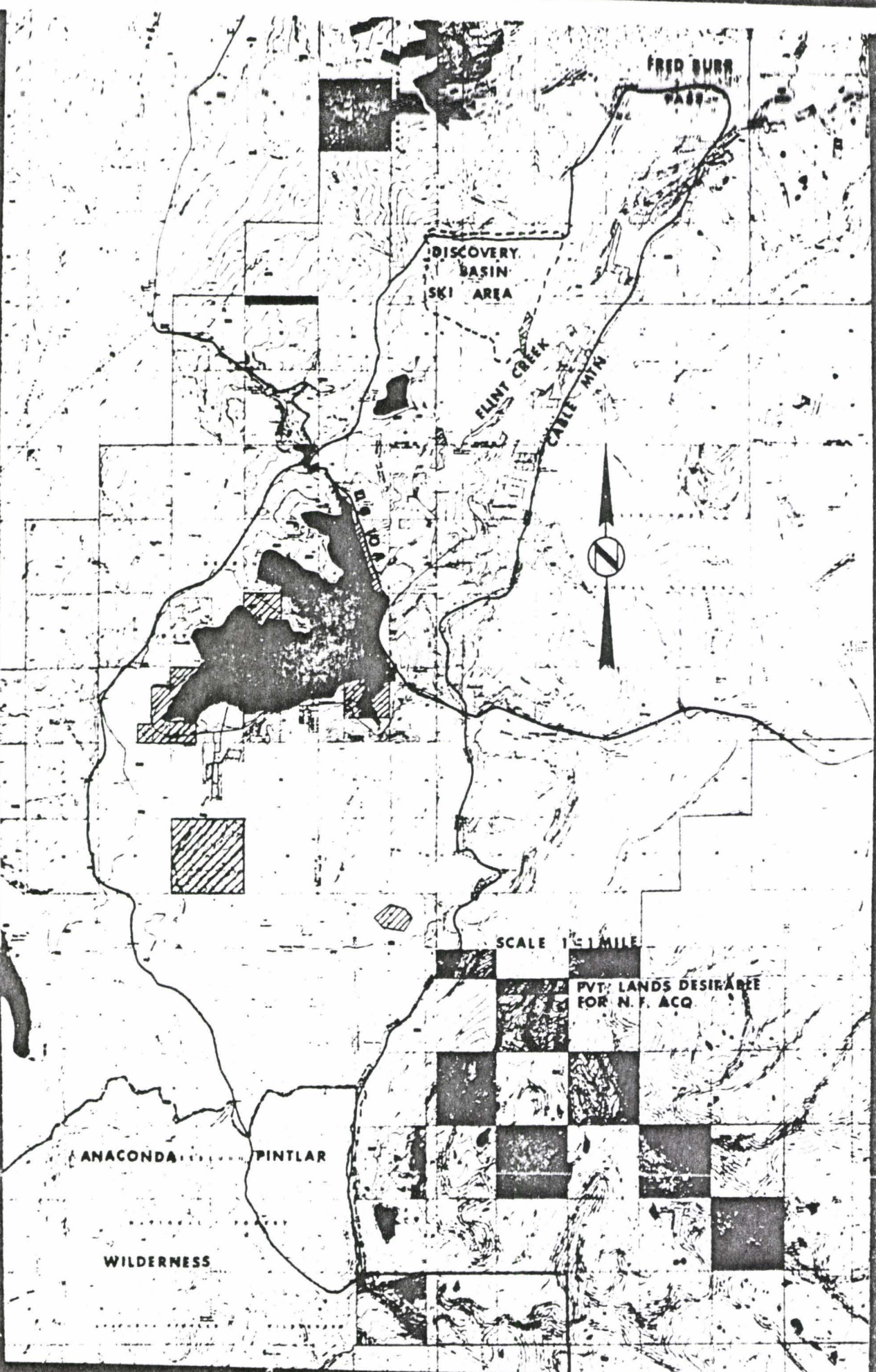
N.F. LANDS SUITABLE
FOR EXCHANGE
ANACONDA
PINTLAR
WILDERNESS

PRIVATE LANDS DESIRABLE FOR OWNERSHIP BY U.S. FOREST SERVICE

Listed by Priority for Acquisition

Township - Range	Location	Description	Size	Value
5N 14W	Portions of the $E\frac{1}{2}NE\frac{1}{4}$, $SE\frac{1}{4}$, S-22		HES 160 ac.±	Public access to Lake, Recreation, Waterfowl, Livestock Water Source
5N 14W	Lots 1, 2 $W\frac{1}{2}W\frac{1}{2}SW\frac{1}{4}$, S-23	#57680 #110	157 ac.±	Public access to Lake, Recreation, Waterfowl Habitat
5N 14W	$NW\frac{1}{4}$, S-13	#57680	107 ac.± Above Lake High Water	Recreation & Public Access to Lake
6N 13W	$E\frac{1}{2}E\frac{1}{2}$, S-28	Gold Bug #9990 Gold Bar #9990	33 ac.±	Possible Ski Area Expansion
5N 13W	$W\frac{1}{2}NW\frac{1}{4}$, $SE\frac{1}{4}$ S-7	Tract located between U.S. 10A & George-Lake	55 ac.± Above Lake High Water	Public Access to Lake, Recreation
5N 13W	$NE\frac{1}{4}$, $E\frac{1}{2}NW\frac{1}{4}$ $N\frac{1}{2}SE\frac{1}{4}$, S-19	#85 #57680	195 ac.± Above Lake High Water (400 ac.)	Public access to Lake Waterfowl Habitat, Recreation, Fish Spawning Area
6N 13W	$SE\frac{1}{4}$, S-32	Moolight Claim #6494	20 ac.±	Recreation Roads
4N 13W	$N\frac{1}{2}$, S-6	HES 556	74 ac.±	Land Administration
5N 14W	All S-35	#57680	640 ac.±	Land Administration Timber
		Total	1441 ac.	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ANACONDA
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GEORGETOWN LAKE BASIN LAND USE SUMMARY

I. GEORGETOWN LAKE

	Granite Co.	Deerlodge Co.
A. Surface Area		
1. 2,818 acres	1,614	1,204
B. Shoreline Ownership	Miles	Percent
1. National Forest	6.825	35.92
2. Anaconda Company	11.200	58.95
3. Other Private	.975	5.13
	19.000	100.00

II. ECHO LAKE

	Granite Co.	
A. Surface Area		
1. 125 Acres	125	
B. Shoreline Ownership	Miles	Percent
1. National Forest	1.326	77.8
2. Other Private	.378	22.2

III. NATIONAL FOREST DEVELOPED FACILITIES - CAMPING, PICNIC

A. Campgrounds	No. Units	P.A.O.T.
1. Lodgepole	31	155
2. Philipsburg Bay	36	180
3. Piney	69	345
4. Cable	11	55
B. Picnic Areas	No. Units	P.A.O.T.
1. Echo Lake	10	50

IV. BOAT LAUNCHING FACILITIES

A. National Forest	Parking Spaces
1. Red Bridge	34
2. Grassy Point	63
3. Piney	8
4. Philipsburg Bay	12
B. Private Commercial Special Use on National Forest	Parking Spaces
1. Denton's Point	125
2. Eccleston's	20
3. Stuart's Landing	12

V. SPECIAL USES - NATIONAL FOREST GEORGETOWN LAKE BASIN

A.	Recreation Residence	57
B.	Boat Docks (Private Use)	26
C.	Organization Camp	1
D.	Ski Area (uphill capacity per hour 1100)	1
E.	Federal Power Com. Reservoir	1
F.	Road Permits	5
G.	Water Transmission	4
H.	Federal Primary Highway	1
I.	Winter Sports (Non-Skiing)	2
J.	Signs & Sanitary Facilities	3
K.	Power Transmission-Aerial & Buried	Numerous
L.	Phone " " " "	Numerous

VI. GEORGETOWN LAKE BASIN PRIVATE LEASES

A.	Anaconda Co. Recreation Residence	75 *
B.	Montana Power Recreation Residence	1

VII. GEORGETOWN LAKE BASIN PRIVATE LANDOWNERS

A.	Other Private Homesites & Tracts	947

*An undetermined number of these leases were sold into private ownership during 1981.

Deerlodge National Forest
PHILIPSBURG RANGER DISTRICT

EPA

GEORGETOWN LAKE

CLEAN LAKES PROJECT

FEB 1982

RECEIVED

P.O. BOX 902
ANACONDA,
MONTANA 59711
TELEPHONE
(406) 563-8415

Director: MIKE KAHOE
Scientist: Paul Garrett

February 11, 1982

Howard Challinor
Georgetown Lake Technical Advisory Committee
U. S. Forest Service
Philipsburg District Office
Philipsburg, Montana 59858

Dear Howard:

The results of the Georgetown Clean Lakes Project to date bring out several major areas of concern relative to Forest Service responsibilities. The first is maintenance of water quality in the North Fork of Flint Creek. The annual report reflects continued high chemical quality of water from this drainage which is important in preventing deterioration in the biological and chemical quality in Georgetown Lake. Of particular importance is the prevention of erosion and subsequent introduction of excessive silt into the reservoir, although the prevention of chemical deterioration from domestic and commercial wastes is also an important consideration.

The results of the septic leachate survey were very encouraging, indicating that water quality in the lake is relatively unaffected to date by domestic wastes from septic tanks and drainfields. To perpetuate that condition, it is important that future development of the shoreline be controlled and kept a minimum of 100 yards, preferably 200, from the high water elevation. This will also allow continued public access, which is excellent now but may become limited in the future should Arco decide to develop or sell their shoreline holdings, which comprise over 50% of the shoreline. I would recommend that the Forest Service pursue all possible avenues to acquire undeveloped shoreline through land trades or direct purchase.

The other major concern is uncontrolled surface land disturbance by recreationists, particularly on the south and north shores of Jericho Bay. I have photos which show considerable run-off and erosion along casual "tracks" established at random by off-road travel. This should be discouraged and a cooperative effort started to improve the perimeter road and control surface run-off to minimize erosion. These areas are prime candidates for commercial development but I believe the best interests of the community would be served if they were open for public use and developed to control recreational activity.

Please contact me again if you wish to discuss the annual report or future management alternatives.

Sincerely,

Paul A. Garrett
Project Scientist

PAG:re